

Effect of *Kanchnar Guggulu* in the management of *Mansaja Granthi* w.s.r. fibroadenoma breast

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Abstract

Introduction: Fibroadenomas of the breast are common accounting for 50% of all the breast biopsies performed. A clinician often faces the dilemma, whether to excise the mass or conservatively treat & monitor it during subsequent follow up. **Objective:** The study was designed to evaluation of clinical efficacy of *Kanchnar Guggulu* in management of fibroadenomas of the breast. **Method:** Recent literature on detection, diagnosis, and natural history of fibroadenomas was reviewed. 30 female patients having sign and symptoms of fibroadenomas breast were randomly selected from outdoor/indoor department of Rishikul Ayurvedic P.G. college Haridwar Uttarakhand. A polyherbal compound Kanchnr guggulu was given orally in a dose of 1gm (2 tablet of 500 mg each) twice a day with luke warm water after meal for a duration of 90 days. Result were assessed on the basis of regression in size of lump. **Results:** The lumps which were within the range of less than 10 mm showed maximum regression in size i.e. 100%, while those lumps which were in the range of 10-12 mm also showed considerable regression of about 87%. Percentage relief in the size of 12-23 mm sized lumps was 75, i.e. even though, not complete but yet remarkable improvement in decrease in size was seen in lumps of probably all sizes. **Conclusion:** Fibroadenoma are the most common benign lesions of the breast with average age of presentation 27yrs. Although the peak incidence is between the second and third decades of life, it is not uncommon in postmenopausal women, with an increased incidence after hormone replacement therapy. *Kanchnar Guggulu* showed significant result in management of fibroadenoma Breast.

Key words: Breast, fibroadenoma, *Kanchnar Guggulu*

INTRODUCTION

A fibroadenoma is a non-cancerous tumor in the breast that is commonly found in women under the age of 30. According to Mammotome, fibroadenomas are diagnosed in approximately 10 percent of women in the United States, African-American women are more likely to develop these tumors.^[1] The most common diagnosed cancers worldwide were those of the lung (1.8 million, 13.0% of the total), breast (1.7 million, 11.9%), and colorectum (1.4 million, 9.7%). In 2012, 1.7 million women were diagnosed with breast cancer and there were 6.3 million women alive who had been diagnosed with breast cancer in the previous 5 years. Since 2008, breast cancer incidences have increased by more than 20%, while mortality has increased by

14%. Breast cancer is also the most common cause of cancer death among women (522,000 deaths in 2012) and the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. It now represents one in four of all cancers in women.^[2] “Breast cancer is also a leading cause of death in the less developed countries of the world. This is partly because a shift in lifestyles is causing an increase in incidence, latest world cancer statistics shows global cancer burden rise to 14.1

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million new cases in 2012: Marked increase in breast and cervix cancers must be addressed because clinical advances to combat the disease are not reaching women living in these regions.”^[4] According to the WHO such death from malignancies would be double by 2020 unless proper preventive efforts are taken to combat them. This present alarming data had created awareness amongst the women of both classes and masses.

Two disease entities namely *Granthi* and *Arbud* developing in any body part simulates the description of tumor, i.e., the disease arising due to excessive, uncommon or peculiar and improper growth of cells. *Charak* had included these in the chapter of *Shotha*^[3] due to similarity in the basic clinical feature, i.e., swelling and protuberances in both these *Shoths viz., Granthi* and *Arbuda*. He clearly stated that these are present in different part of the body, these are many in number due to difference in their location, clinical features, names and types. *Kanchnar Guggulu*^[4] was mentioned in text for management of *Granthi*. This clearly indicates that basically etiopathogenesis, clinical features and treatment of reproductive system are identical to the tumors of any other body part; however, a few clinical features present due to specific location of disease had to be notified.

According to *Charak Samhita*^[6] -*Mansaja Granthi* is big and painless muscular structure.

MATERIALS AND METHODS

Method of Selection of Data

Patients with classical symptoms and sign of fibroadenoma breast will be randomly selected from the out patients department/inpatient department of post-graduate Department of *Shalya Tantra* and Department of *Prasuti Tantra*, Rishikul Ayurvedic College and Hospital, Haridwar, Uttarakhand.

Sample Size

A single trial group of 30 patients was taken for the study to evaluate the efficacy of the trial drug.

Inclusion Criteria

Women of age group 15-40 years were selected with nodularity maximum of size 5 cm in diameter were considered for inclusion in the study. In the patients of >35 years of age, a thorough clinical examination of the breast was done followed by bi-planar mammography. Firm reassurance against cancer was given in all the patients.

Exclusion Criteria

Patients with discrete lump which were suspicious of malignancy after clinical, imaging, and cytological

examination, women suffering from uncontrolled diabetes mellitus, hypertension, coronary artery disease or any other systemic disease.

Criteria for Diagnosis

Patients visiting OPD with the chief complaint of the presence of a movable breast lump were selected on the basis of a local examination of the breast, followed by fine needle aspiration cytology to rule out malignancy, ultrasonography (USG) and mammography.

Investigation

Routine investigations

Hematological investigations: Total leukocyte count, differential leukocyte count, hemoglobin concentration, erythrocyte sedimentation rate, fasting and postprandial blood sugar, blood urea, and serum creatinine.

Specific investigation

Fine needle aspiration cytology (pre and post therapy)

Mammography/USG
Histopathological examination } When required

OBSERVATION^[6]

In this clinical trial, only 4 (13.33%) patients reported of seeking prior medical advice after being aware of the disease, while 26 (86.60%) patients were new to the disease and freshly reported within 6 months of being aware of the lump. Thus, majority of the patients attend health clinic quite early due to the early presentation of lump. In fibroadenoma, lump is the only presenting symptom. These observations are opposite to carcinoma breast cases in which only 29.7% patients reported within 6 months of the appearance of symptoms for possible prophylactic intervention. Delay in appearance of lump and absence of pain leads to late detection and poor prognosis in breast cancer. But in fibroadenoma, lump is the early symptom, which forces the patients to seek early medical advice delay in the appearance of lump and absence of pain leads to late detection and poor prognosis in breast cancer. The most common age group affected in this study is between 15 and 25 years,^[7] average being 20 which justify the incidences. None of the patients belongs to age group >46 years. This observation is just opposite to carcinoma breast cases, where most of the patients are in their late 40's.

In this study, most of, i.e., 24 (80%) patients belongs to urban area and only 6 (20%) belongs to rural area. Similarly, 56.66% of patients were from lower socio-economic status and 3.33% patients belong to the lower class and the rest of them belongs to middle class [Figures 1-3].

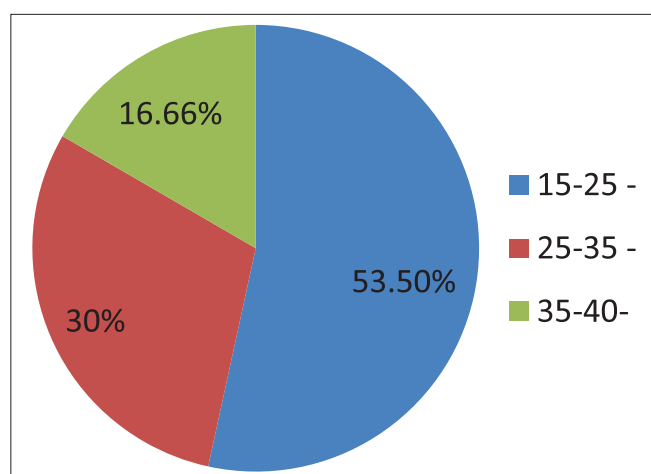


Figure 1: Distribution of 30 patients of *Mansaja Granthi* according to age

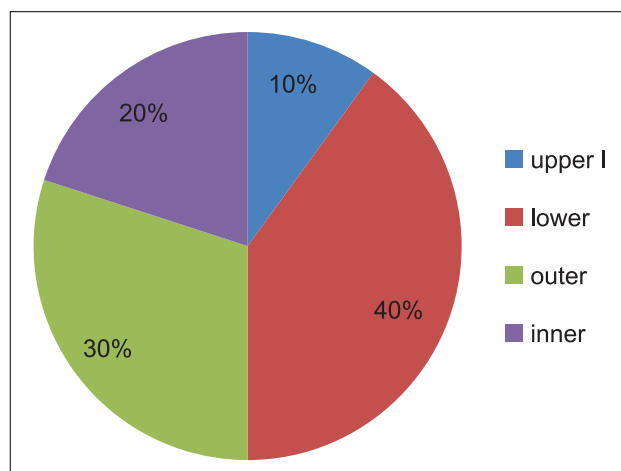


Figure 2: Distribution of 30 patients of *Mansaja Granthi* according to quadrant involved

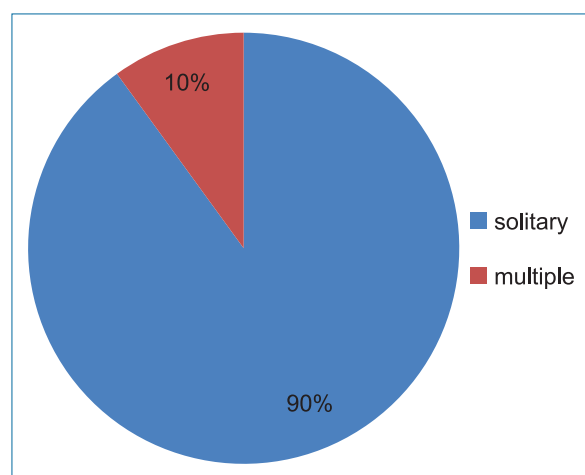


Figure 3: Distribution of 30 patients of *Mansaja Granthi* according to number of lump

DISCUSSION^[7]

The breast had always been a symbol of women hood and ultimate fertility. As a result, both disease and surgery of the breast evoke a fear of mutilation and loss of feminist [Table 1].

According to “International Journal of Research” it is associated with long-term risk of breast cancer. Cumulative risk of breast cancer is 0.7% after 5 years of diagnosis and 2.2% after 10 years of diagnosis. Data show the need of study, *Kanchnar* and *Guggulu* had all the necessary properties of *Deepan*, *Pachan*, *Vatta-Kaph shamak*, *Shoth-har*, *Lekhan*, *Bhedi*, etc., which helps to get rid of the cardinal symptoms of *Mansaja-Granthi*. *Kanchnar*’s alcoholic extract has anti-cancerous activity. *Guggulu* contains oleoresin which was found to be highly potent anti-inflammatory and anti-arthritis effect. Crude *Guggulu* has highly encouraging hypolipidemic activity. Stem and bark of *varun* contains lupeol which shows potent lithotriptic and anti-goiter activity. Fruit powder of *Emblia officinalis* said to have potent anti-diabetic and hypoglycemic activity. Anti-inflammatory activity, antioxidant property is also reported of *lethal* does 50% of *chebulin* and it also had anti-spasmodic effect. In this study of 30 cases of fibroadenoma of breast, there were 18 (60%) married patients and 12 (40%) patients were unmarried which indicate its maximum incidence among married women and these findings are just opposite to the incidences of carcinoma breast which occur commonly in nullipara, spinsters and nuns.

Regression in the Size of Lump

During this due course of 3 months, it was observed that the lumps which were within the range of <10 mm showed maximum regression in size, i.e., of about 100%, while those lumps which were in the range of 10-12 mm also showed

Table 1: Possible correlation with modern diseases

Disease entity described in books of surgery	Distinguishing clinical features taken for congruence	<i>Granthi/Arbuda</i> described in <i>ayurvedic</i> classics
Fibroadenosis	Blue domed comparatively small cyst	<i>Vataj Granthi</i> ^[8]
Fibroadenoma	Smooth, hard, mobile tumor	<i>Mansaja – Granthi</i>
Giant fibroadenoma	Usually, reteromammary hard tumor causing unilateral hypertrophy of breast	<i>Mamsa – Arbud</i> ^[9]

considerable regression of about 87%. Percentage relief in the size of 12-23 mm sized lumps was 75%. Percentage relief in the size of the lump was 69%, i.e., even though, not complete but yet remarkable improvement in size was seen in lumps of probably all sizes.

Before treatment, the mean of the size of lump of 30 patients was 3.27 and after treatment the mean of the size of lump was 1.29 and overall 69.27% of relief in the size was seen. On statistical observation $P < 0.001\%$. It means that the data was highly significant in reduction in the size of lump.

On modern parameter, it can be postulated that the drug might have reduced the enlargement by its anti-inflammatory, antihypolipidemic, anti-fibrinolytic activity exhibited by the chemical components of the drug. Furthermore, certain chemical constituent of the drug like Piperine (*Marich*) and beta-sitosterol of *Kanchnar* exhibits anti-tumor property thereby helping in regression in the size of the mass.

In this way, we experienced that *Kanchnar Guggulu* proved to be effective in the medical management of the condition of *Mansaja Granthi* related to fibroadenoma breast [Figures 4 and 5].

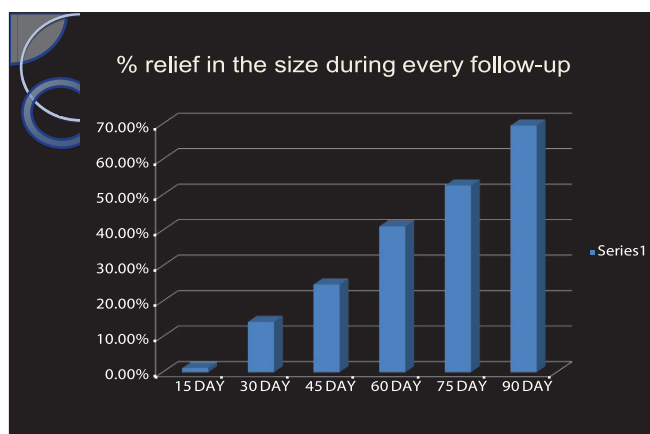


Figure 4: Percentage relief in the size during every follow-up

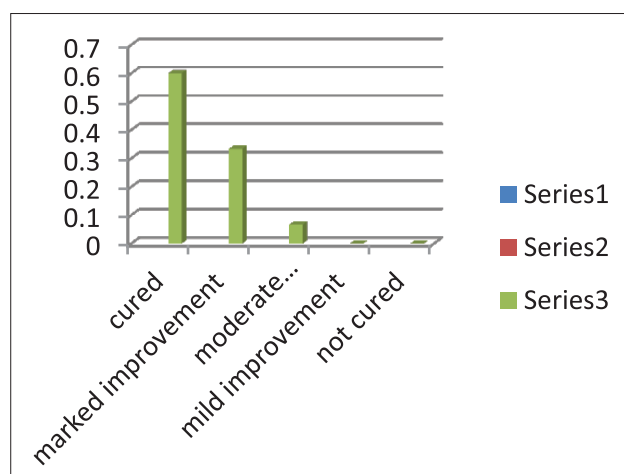


Figure 5: Overall effect of therapy

CONCLUSION AND RECOMMENDATION

“Breast health means more than breast cancer” much attention has been given to the care and cure of carcinoma breast, cases yet fibroadenoma remains still a “mystery” and a controversial disease. Although no exact description of this disease is available in ancient classics but its presentation and clinical features closely relates to “*Granthi*” (specially *Mansaja* type). In ayurvedic literatures, *Kanchnar Guggulu* has been described for its special properties and effect over cystic and glandular swellings, therefore, this had been chosen and tried in 30 cases of fibroadenoma of breast and was found out to be considerably effective in alleviating the symptoms of the *Granthi*. This beneficial effect of the trial drug may be due to its *Deepan*, *Pachan*, *Bhedi*, *Lekhan* *Tridosha-shamak*, anti-oxidant, anti-inflammatory, anti-tumor, anti-fibrinolytic, and anti-hypolipidemic properties.

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